BUILDING TRUST
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PRODUCT DATA SHEET

Sikaflex®-211 SW

Polyurethane sealant capable of application by swirl spray

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-component polyurethane
Colour (CQP001-1)	Gray
Cure mechanism	Moisture-curing
Density (uncured)	1.40 kg/l
Non-sag properties	Good
Application temperature	5 – 40 °C
Skin time (CQP019-1)	35 minutes [A]
Curing speed (CQP049-1)	(see diagram 1)
Shore A hardness (CQP023-1 / ISO 48-4)	30
Tensile strength (ASTM D412)	1.3 MPa
Elongation at break (ASTM D412)	650 %
Service temperature (CQP513-1)	-40 – 90 °C
Shelf life	6 months [B]

CQP = Corporate Quality Procedure

A) 23 °C / 50 % r.h.

B) stored below 25 °C

DESCRIPTION

Sikaflex®-211 SW is a 1-component polyurethane sealant whose thixotropy makes it suitable for application by means of a swirl spray while maintaining good sag and slump characteristics. It bonds well to a wide variety of substrates and is suitable for making permenant elastic seals.

PRODUCT BENEFITS

- Capable of application by swirl spray
- Good gap bridging and sag characteristics even after shearing
- Bonds to a wide variety of substrates, often without the need for special pre-treatment
- Can be sanded and painted
- Short cut-off string

AREAS OF APPLICATION

Sikaflex®-211 SW is a multi-purpose sealant specifically designed for applications where it is desired to dispense via a swirl spray, a method where the sealant obtains a ribbon-like appearance by use of a high speed rotational nozzle. Additionally, due to its thixotropy, Sikaflex®-211 SW can also be applied as a standard bead. Sikaflex®-211 SW is suitable on substrates such as metals, metal primers and paint coatings (2-component systems), and fiber reinforced plastics.

Seek manufacturer's advice and perform tests on original substrates before using Sikaflex®-211 SW on materials prone to stress cracking. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

CURE MECHANISM

Sikaflex®-211 SW cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

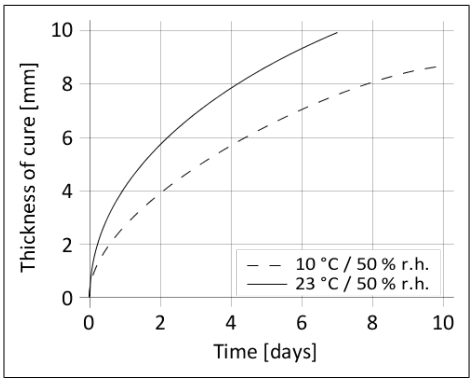

Diagram 1: Curing speed of Sikaflex®-211 SW

CHEMICAL RESISTANCE

Sikaflex®-211 SW is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, glycolic alcohol, concentrated mineral acids and caustic solutions or solvents.

METHOD OF APPLICATION

Surface Preparation

Surfaces must be clean, dry and free from grease, oil and dust.

Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. Suggestions for surface preparation may be found on the current edition of the appropriate Sika® Pre-Treatment Chart. Consider that these suggestions are based on experience and have in any case to be verified by tests on original substrates.

Application

Sikaflex®-211 SW can be processed between 5 °C and 40 °C but changes in reactivity and application properties have to be considered. The optimum temperature for substrate and process material is between 15 °C and 25 °C.

Sikaflex®-211 SW is designed specifically to be processed with pump equipment using high speed rotating nozzles to obtain a ribbon-like appearance but can be dispensed as a bead with standard nozzles as well.

For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Tooling and finishing

Tooling and finishing must be carried out within the skin time of the product. It is recommended using Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility prior the use.

Removal

Uncured Sikaflex®-211 SW may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin have to be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

Overpainting

Sikaflex®-211 SW can be painted after formation of a skin. If the paint requires a baking process, best performance is achieved by allowing the sealant to fully cure first. 1C-PUR and 2C-acrylic based paints are usually suitable. All paints have to be tested by carrying preliminary trials under manufacturing conditions.

The elasticity of paints is usually lower than that of sealants. This could lead to cracking of the paint in the joint area.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- Sika Pre-treatment Chart
  For 1-component Polyurethane
- General Guideline
  Bonding and Sealing with 1-component Sikaflex®

PACKAGING INFORMATION

Drums	189 L

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

DISCLAIMER

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